

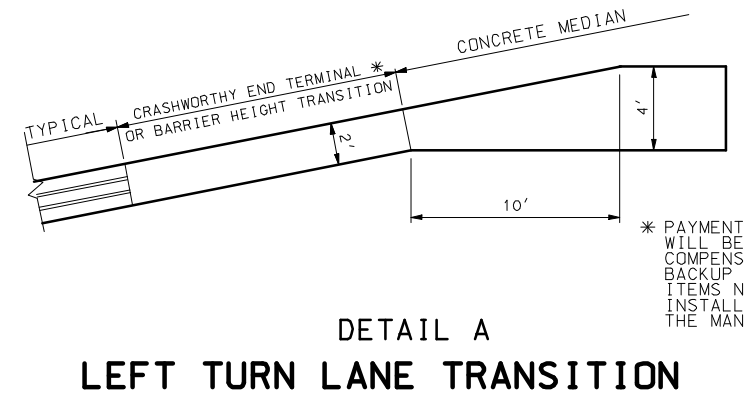
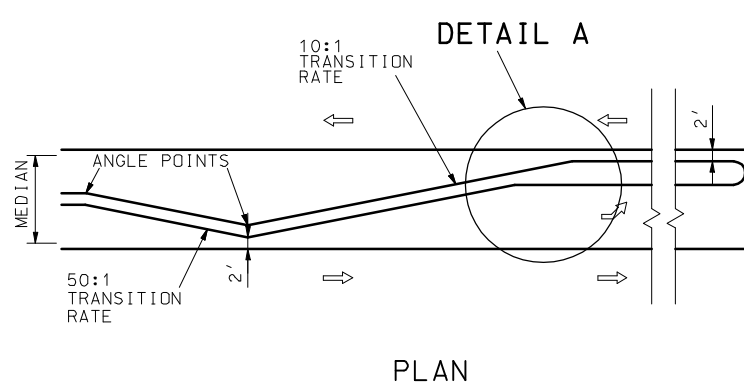
GENERAL NOTES:

HEIGHT TRANSITIONS SHALL NOT BE USED IN LOCATIONS WHERE THE POSTED SPEED IS GREATER THAN 35 MPH.

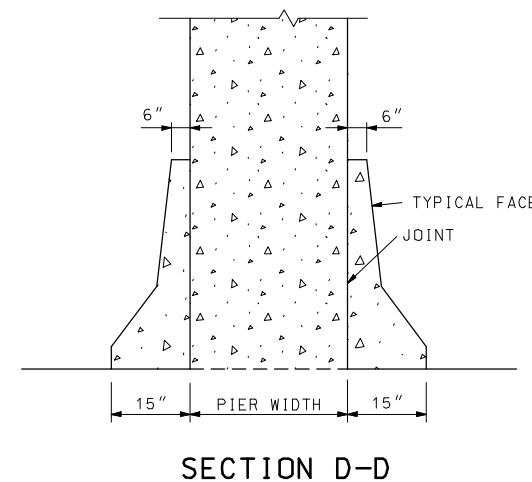
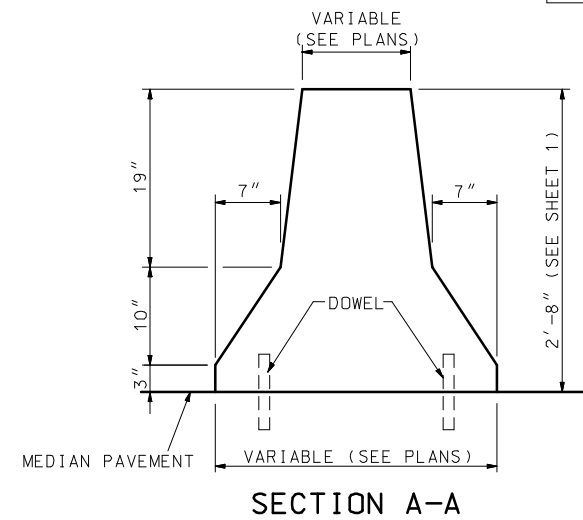
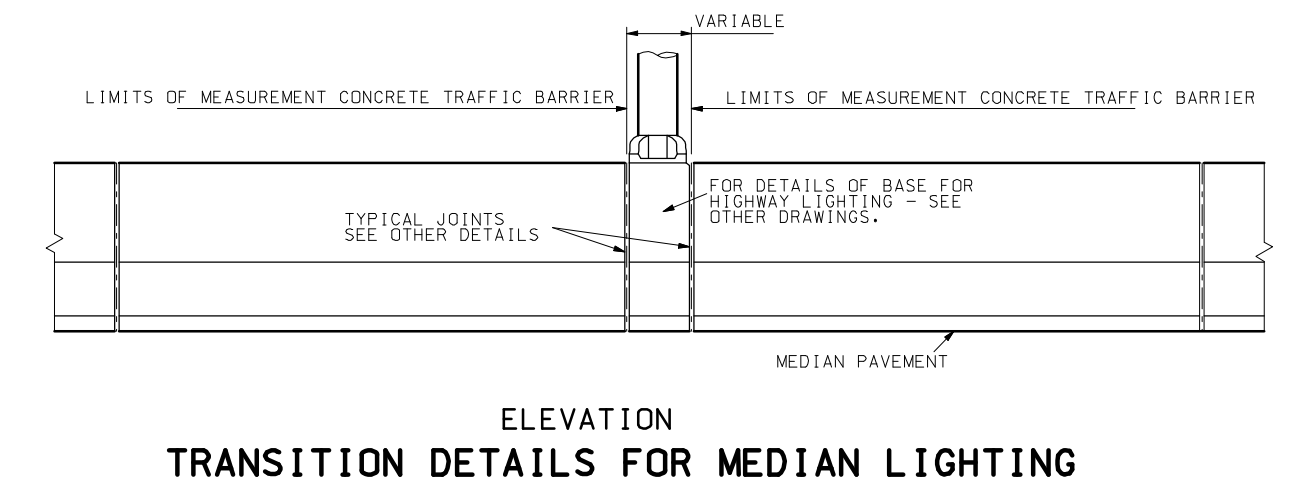
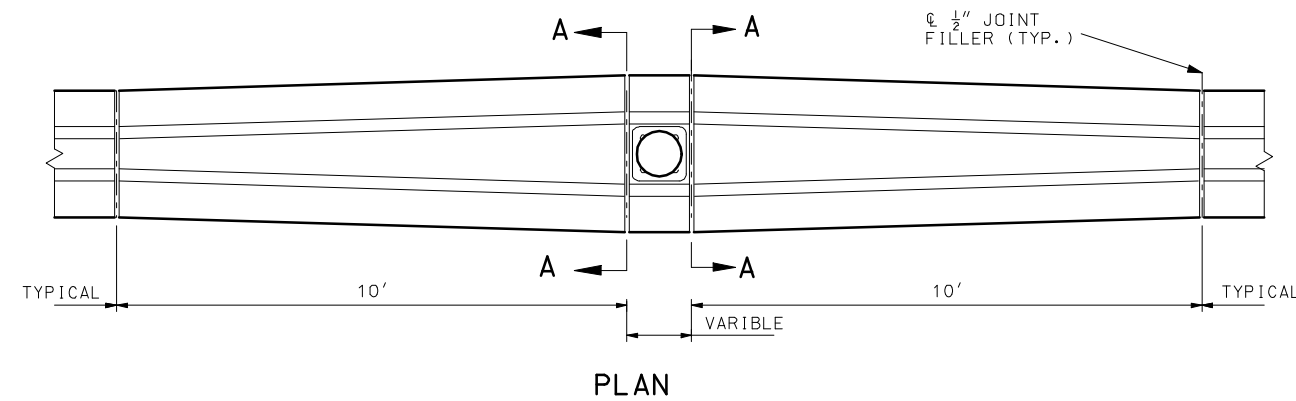
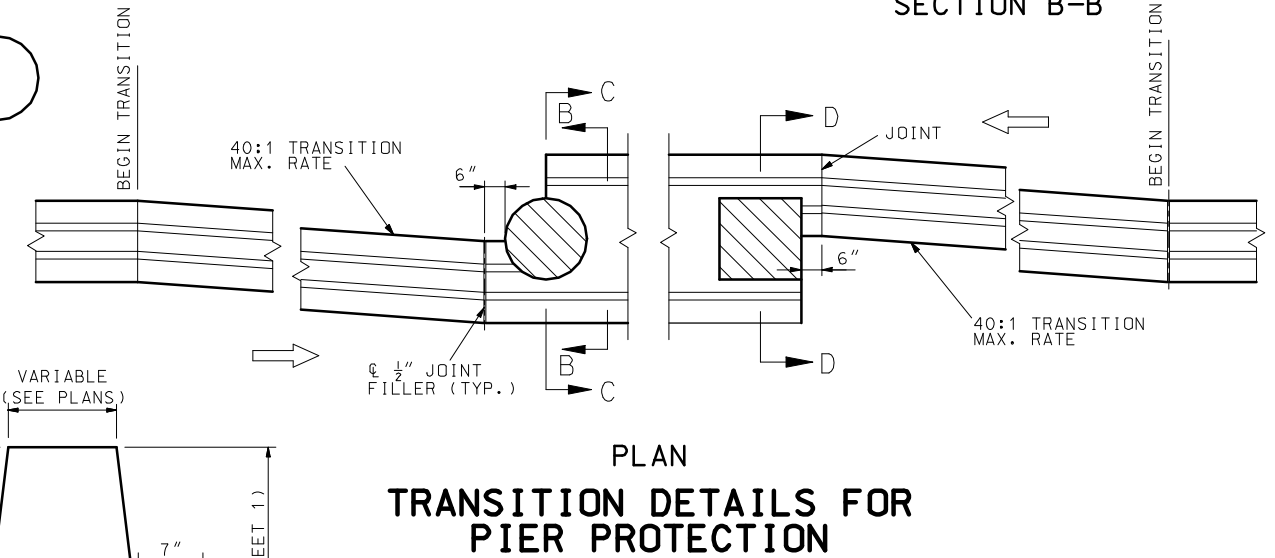
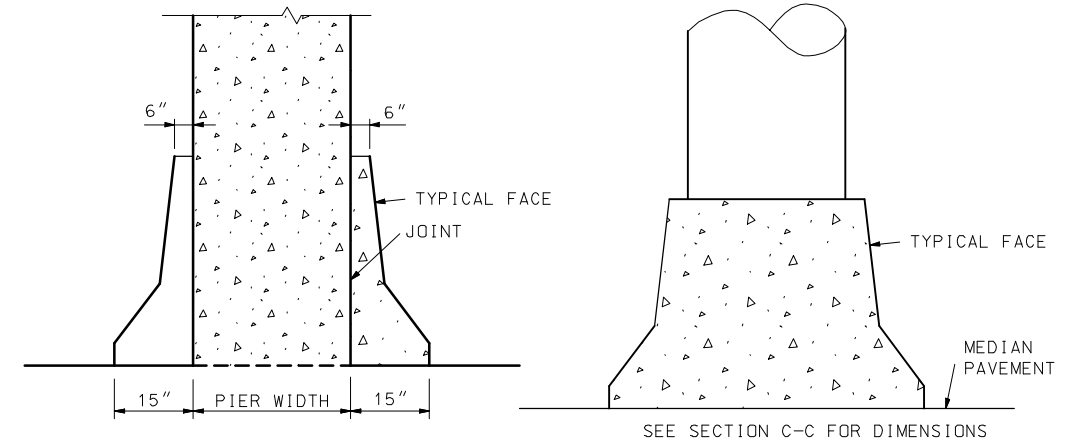
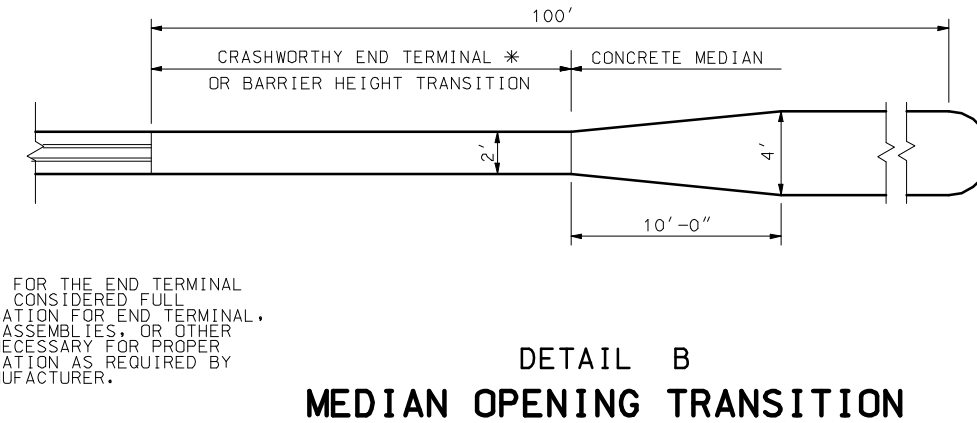
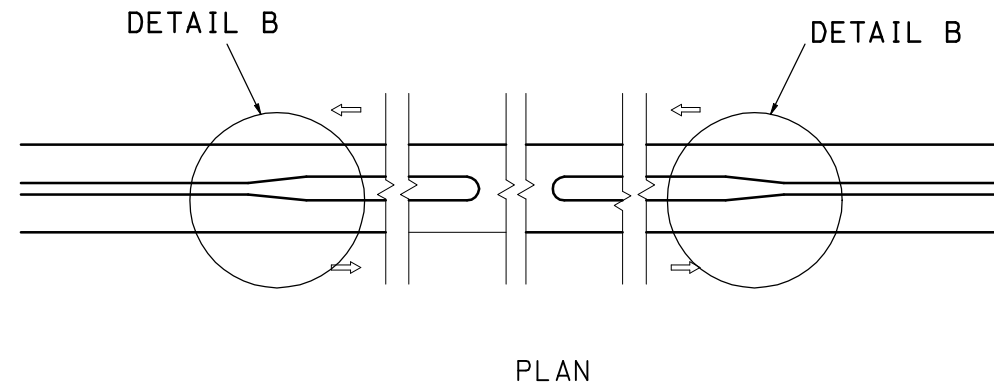
ALL TOP AND END EDGES SHALL BE CHAMFERED $\frac{3}{4}$ INCH.

EXPANSION JOINTS SHALL BE PROVIDED IN THE BARRIER TO MATCH EXPANSION JOINTS IN PAVEMENT.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
PERMANENT CONCRETE TRAFFIC BARRIER TYPE A AND B			
DATE: _____	EFFECTIVE: 09-01-2006	617.10D	1/7



* PAYMENT FOR THE END TERMINAL WILL BE CONSIDERED FULL COMPENSATION FOR END TERMINAL, BACKUP ASSEMBLIES, OR OTHER ITEMS NECESSARY FOR PROPER INSTALLATION AS REQUIRED BY THE MANUFACTURER.

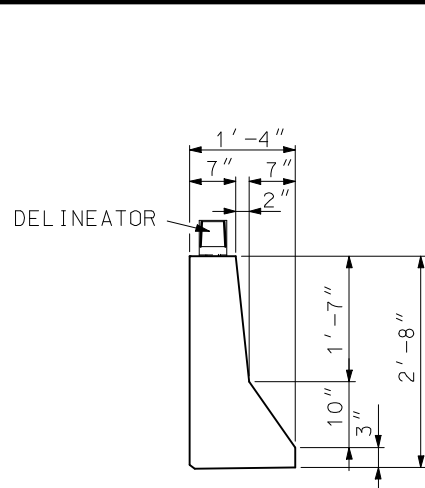


NOTES:

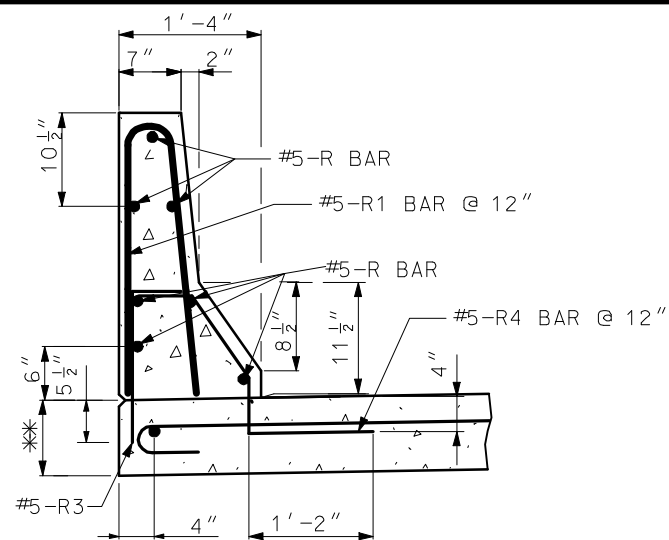
FOR DETAILS AND LOCATION OF DOWELS, SEE SHEET 1.

JOINT SHALL BE TWO LAYERS OF 55 LB. SMOOTH ROLL ROOFING TO FORM JOINT BETWEEN PIER AND BARRIER. IN SEISMIC AREAS, A ONE-INCH JOINT WITH JOINT FILLER AND SEALER SHALL BE USED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
PERMANENT CONCRETE TRAFFIC BARRIER TYPE A AND B			
DATE: _____	EFFECTIVE: 09-01-2006	617.10D	2/7



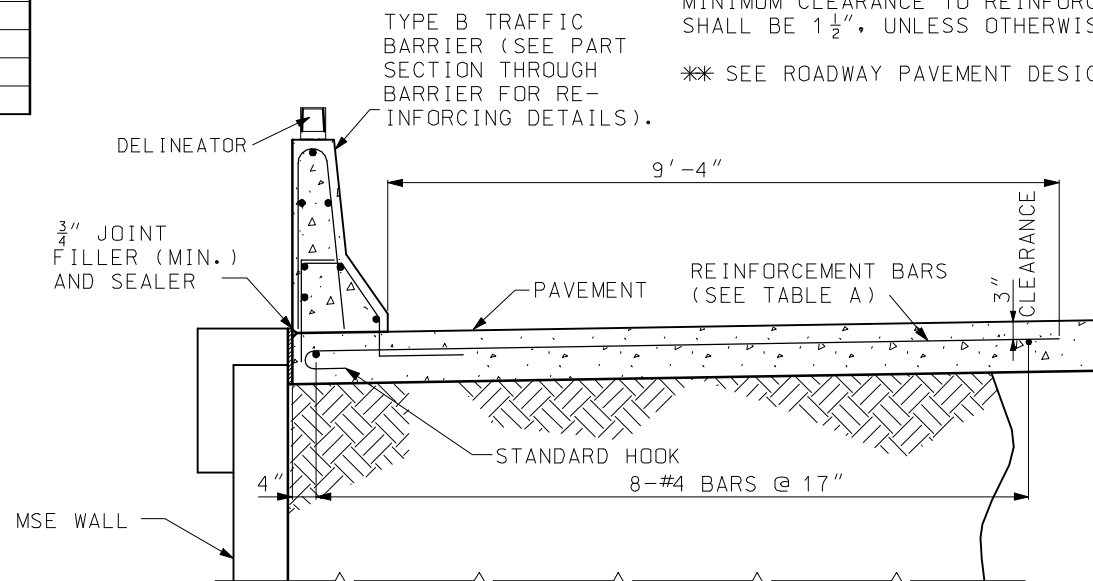
TYPE B (MODIFIED)
TYPICAL SECTION



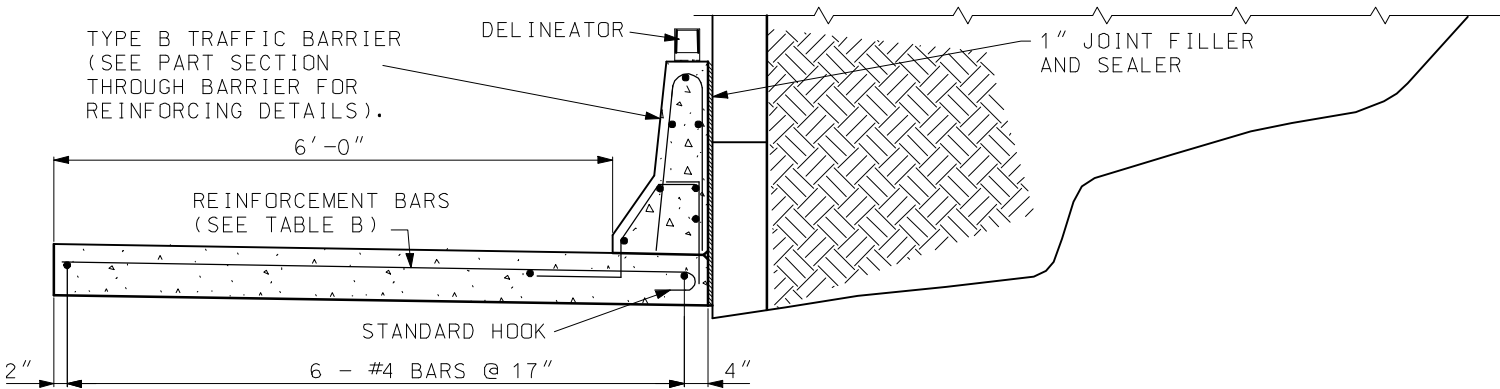
PART SECTION THROUGH BARRIER

TABLE A TRANSVERSE PAVEMENT REINFORCEMENT	
PAVEMENT THICKNESS **	BAR SIZE & SPACING
8"	#5 @ 5"
9"	#5 @ 6"
10"	#5 @ 8"
11"	#5 @ 9"
≥ 12"	#6 @ 12"

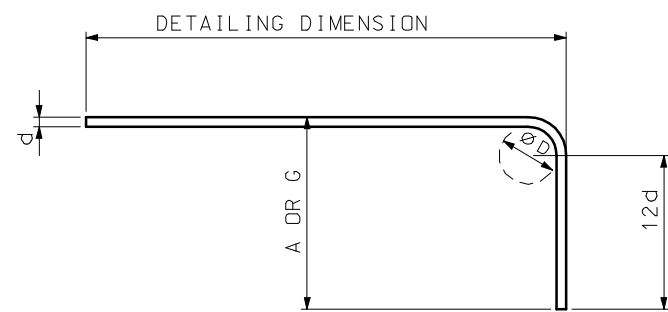
- NOTES:
- ALL REINFORCING STEEL SHALL BE EPOXY COATED.
 - NO DIRECT PAYMENT WILL BE MADE FOR REINFORCING STEEL.
 - MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1 1/2", UNLESS OTHERWISE SHOWN.
 - ** SEE ROADWAY PAVEMENT DESIGN.



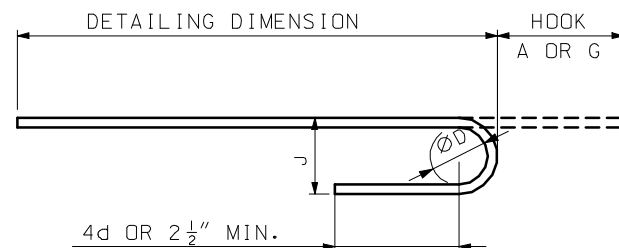
TYPE B TRAFFIC BARRIER ON TOP OF MSE WALL



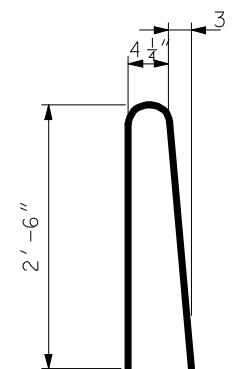
TYPE B TRAFFIC BARRIER AT THE SIDE OF MSE WALL



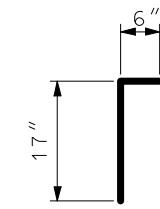
90° HOOKS



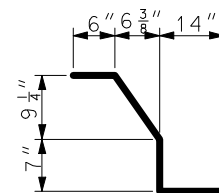
180° HOOKS



#5-R1



#5-R3



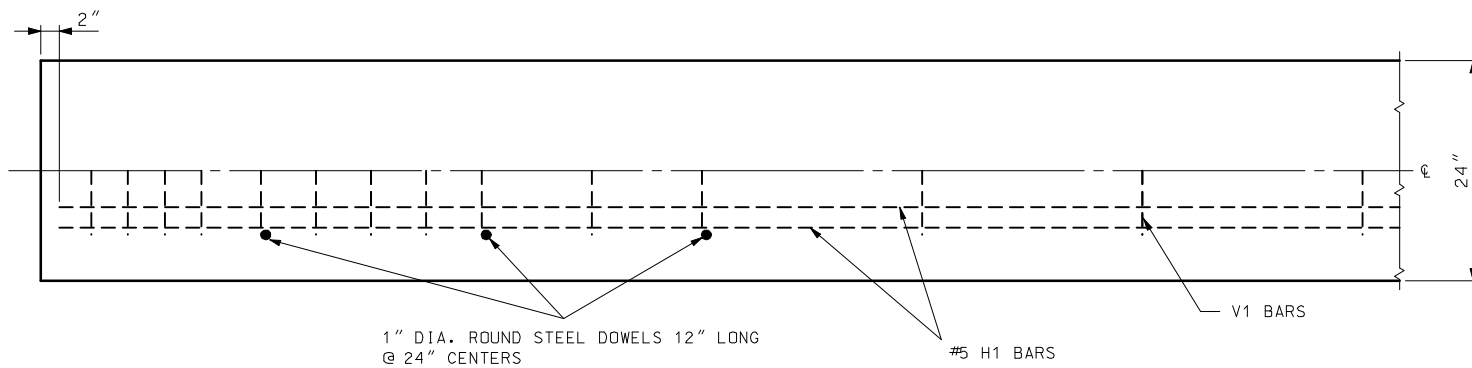
#5-R4

- NOTES:
- TYPE B (MODIFIED) SHALL BE USED ONLY AT LOCATIONS SHOWN IN PLANS.
 - FOR DELINEATOR DETAILS, SEE SHEET 1.

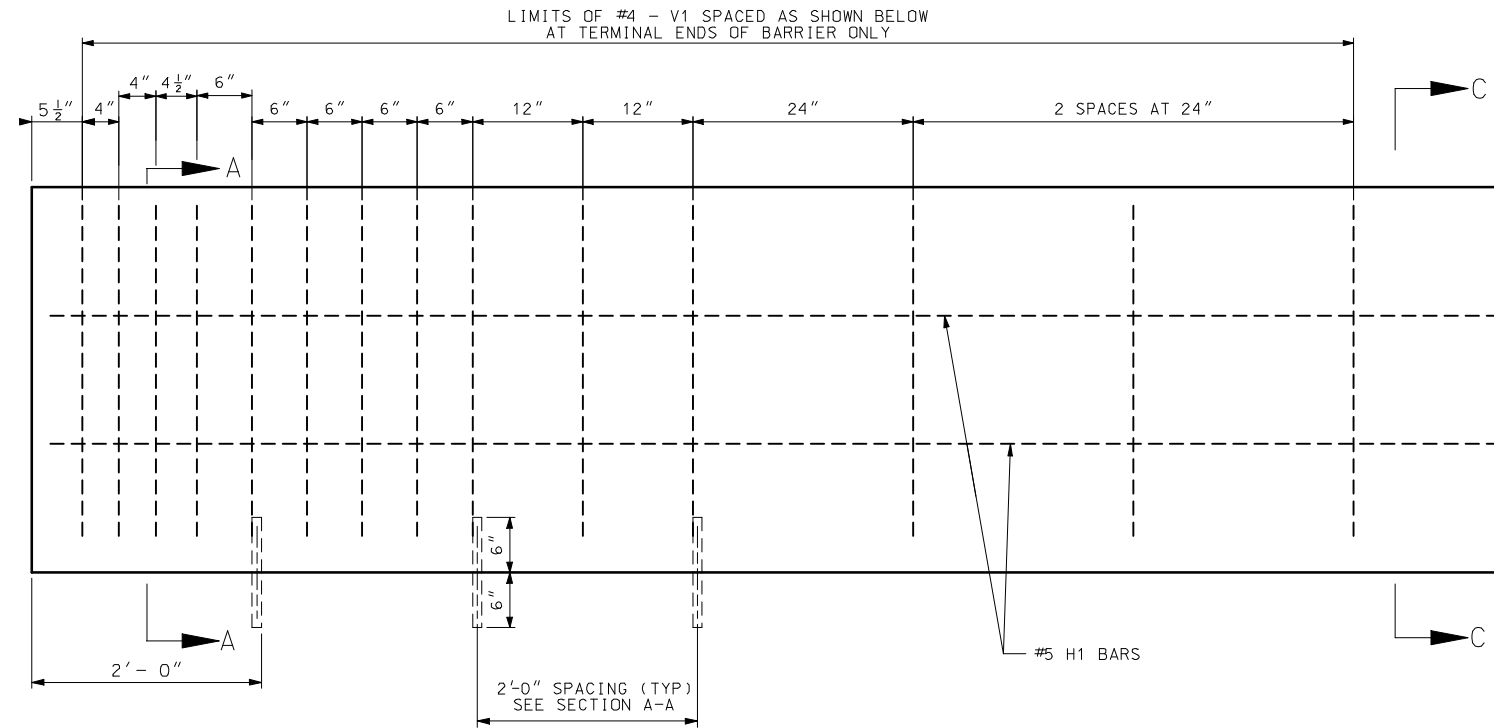
TABLE B TRANSVERSE PAVEMENT REINFORCEMENT	
PAVEMENT THICKNESS **	BAR SIZE & SPACING
8"	#6 @ 6"
9"	#6 @ 8"
10"	#6 @ 9"
11"	#6 @ 11"
≥ 12"	#6 @ 12"

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
		PERMANENT CONCRETE TRAFFIC BARRIER AT MSE WALL TYPE B	
DATE: _____	EFFECTIVE: 09-01-2006	617.10D	<div>3</div> <div>7</div>

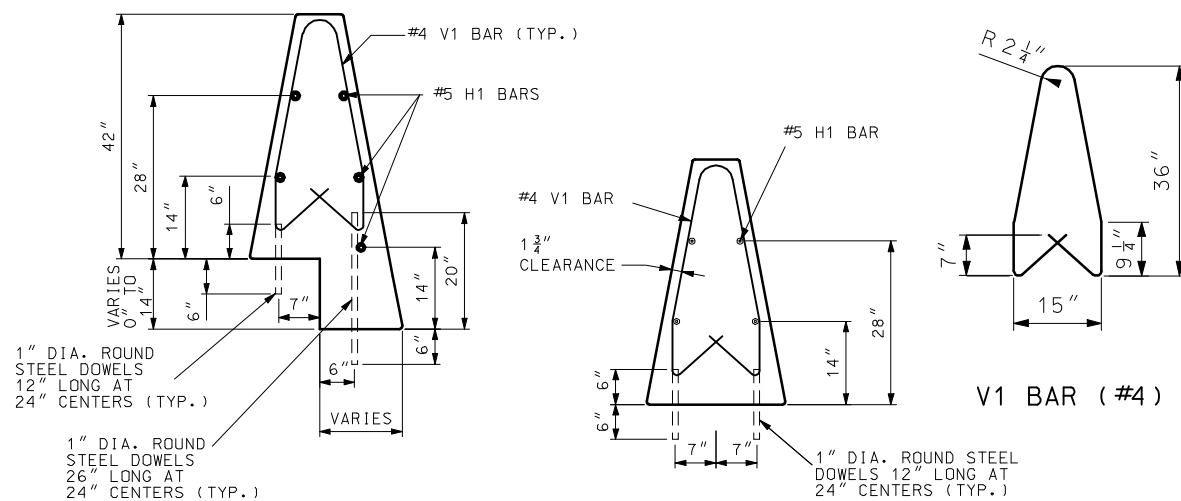
END HOOK DIMENSIONS				
BAR SIZE	D (IN.)	ALL GRADES		
		180° HOOKS		90° HOOKS
		A OR G	J	A OR G
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	12"



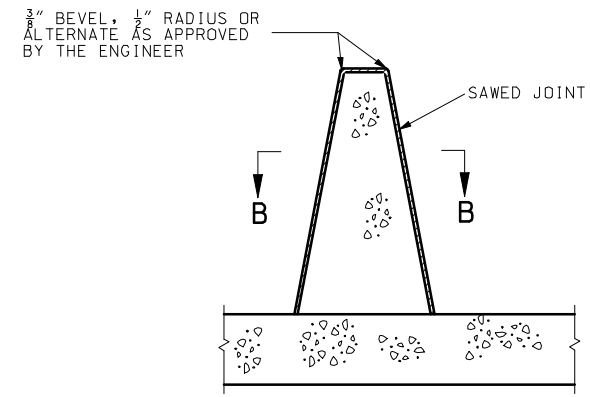
PLAN VIEW
(SYMMETRICAL ABOUT CENTERLINE)



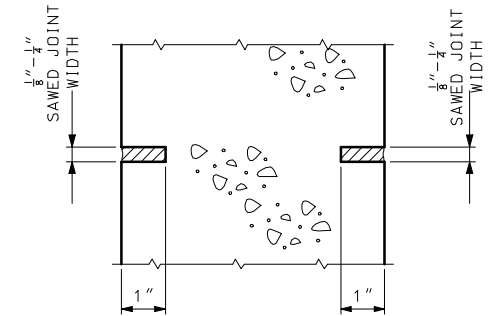
ELEVATION



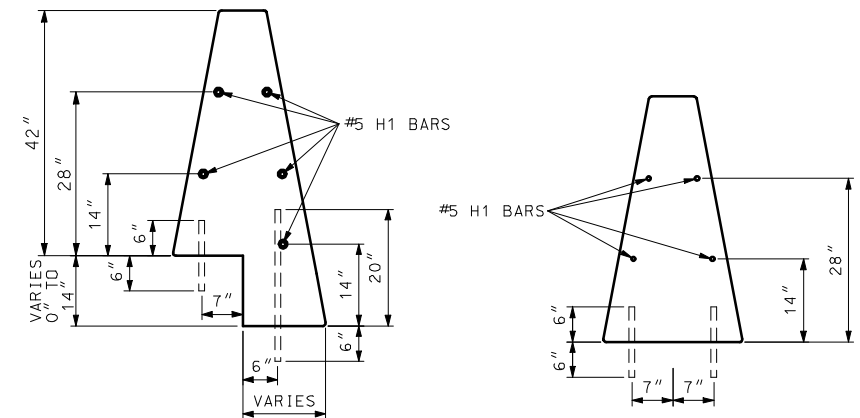
REINFORCING DETAILS



SECTION THROUGH SAWED JOINT



SECTION B-B



SECTION C-C
(STEPPED PAVEMENT)

SECTION C-C
(NORMAL PAVEMENT)

NOTES:

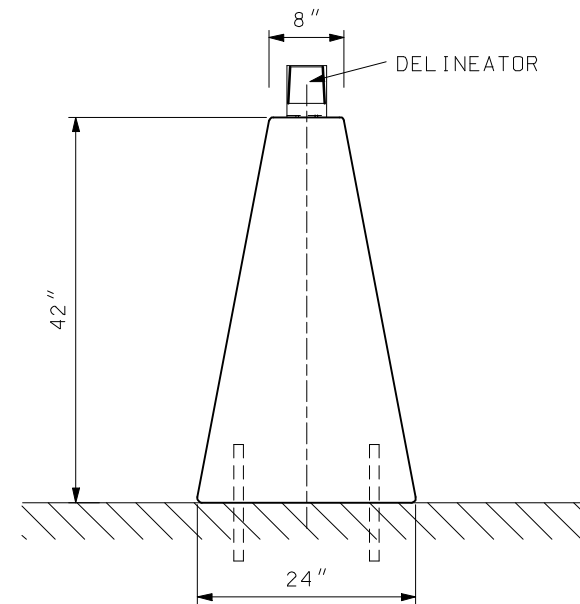
BAR SPLICES SHALL BE A MINIMUM OF 24 TIMES THE NOMINAL DIAMETER OF THE BAR.

ANY REINFORCING BAR INSTALLATION METHOD DEvised BY THE CONTRACTOR AND APPROVED BY THE ENGINEER THAT WILL ASSURE THE LONGITUDINAL REINFORCING STEEL WILL BE POSITIONED $\pm \frac{1}{2}$ INCH AS DIMENSIONED WILL BE SATISFACTORY.

THE CONTRACTOR HAS THE OPTION TO SLIP-FORM THE BARRIER. IN WHICH CASE, ADDITIONAL REINFORCEMENT MAY BE TIED TO THE UPPER TWO-THIRDS OF THE REINFORCING CAGE TO PROVIDE BRACING.

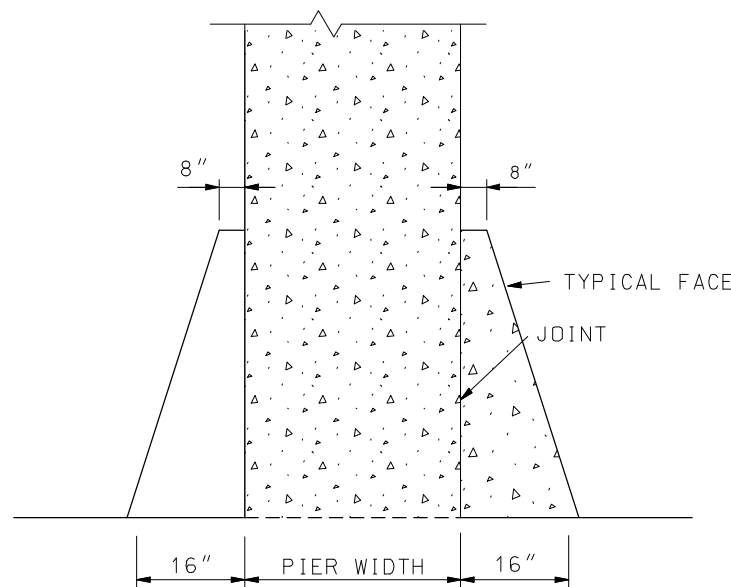
SAWED JOINTS SHALL BE LOCATED AT PAVEMENT TRANSVERSE JOINTS.

FOR DELINEATOR DETAILS, SEE SHEET 1.

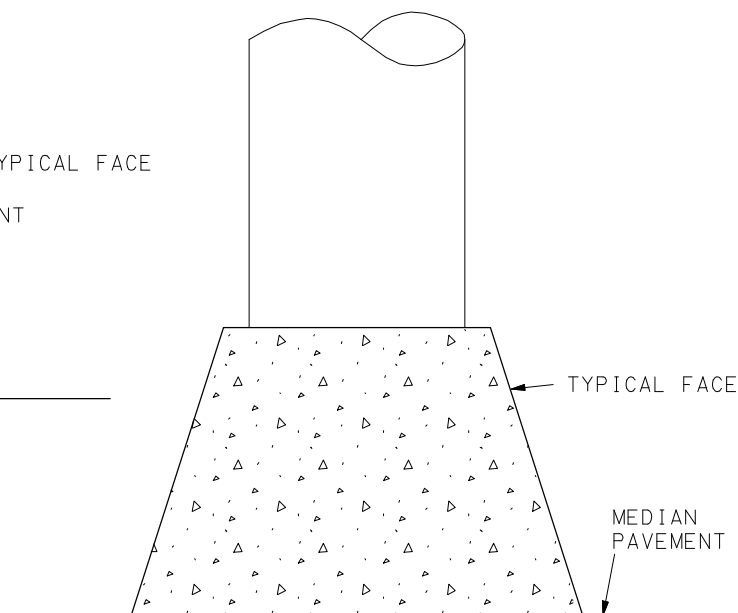


TYPE C
TYPICAL SECTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
PERMANENT CONCRETE TRAFFIC BARRIER TYPE C			
DATE: _____	EFFECTIVE: 09-01-2006	617.10D	4/7

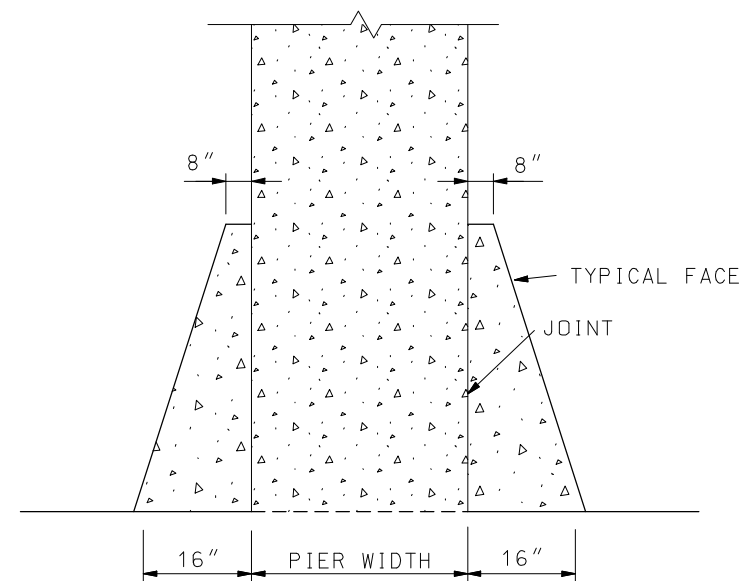


SECTION A-A

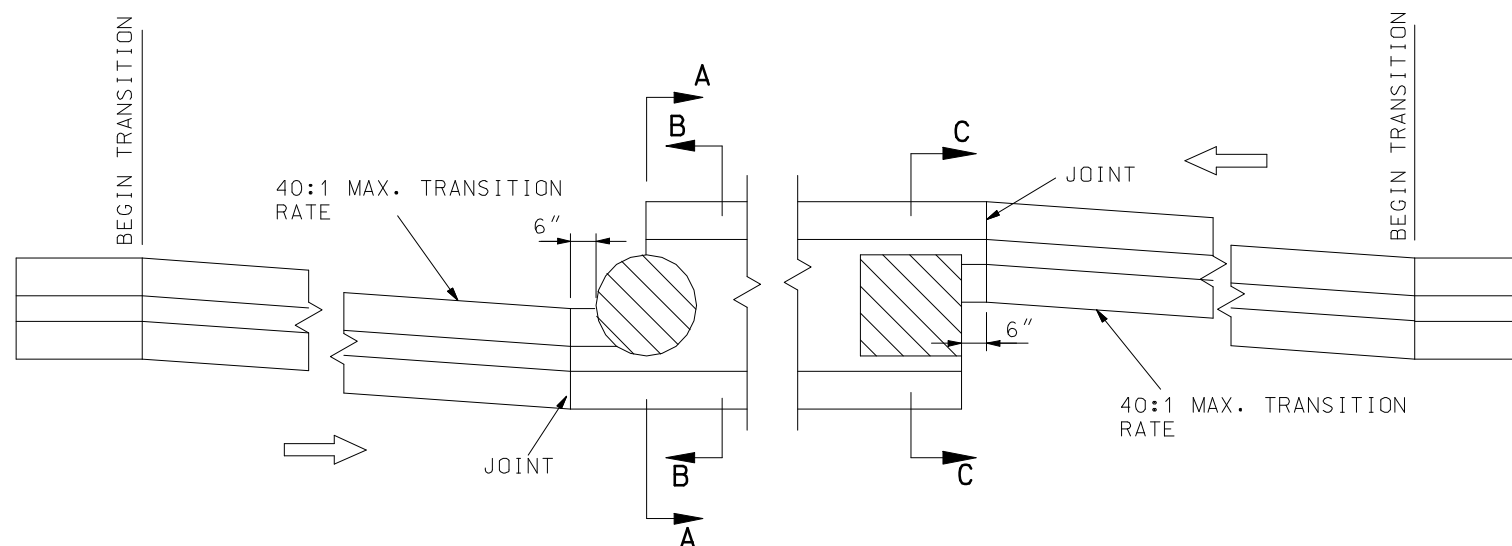


SEE SECTION C-C FOR DIMENSIONS

SECTION B-B



SECTION C-C



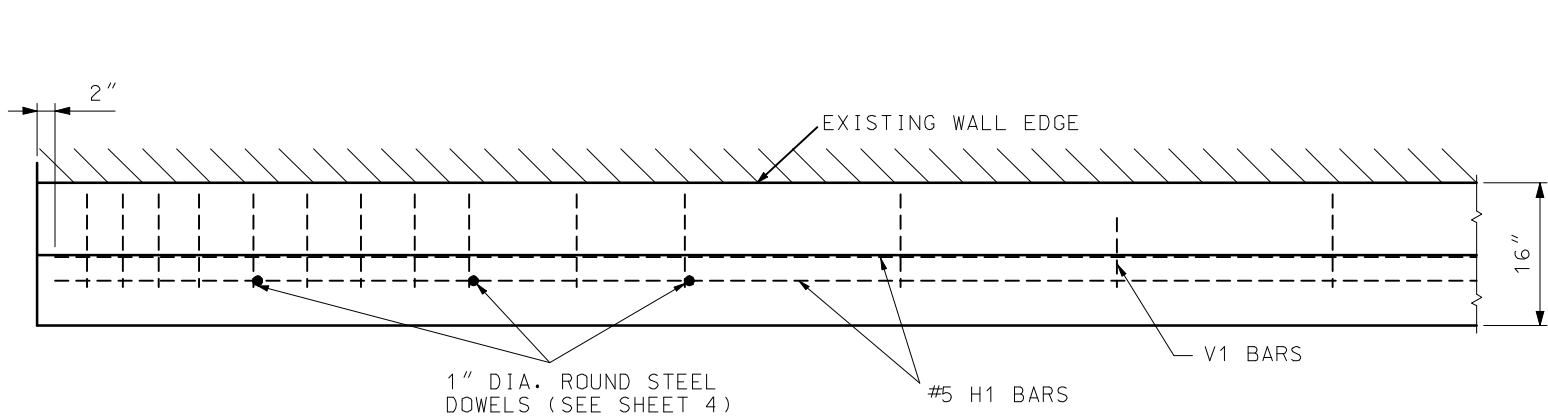
PLAN

TRANSITION DETAILS FOR PIER PROTECTION

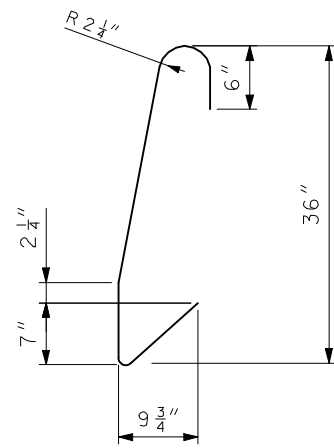
GENERAL NOTE:

JOINT SHALL BE TWO LAYERS OF 55 LB. SMOOTH ROLL ROOFING TO FORM JOINT BETWEEN PIER AND BARRIER. IN SEISMIC AREAS, A ONE-INCH JOINT WITH JOINT FILLER AND SEALER SHALL BE USED.

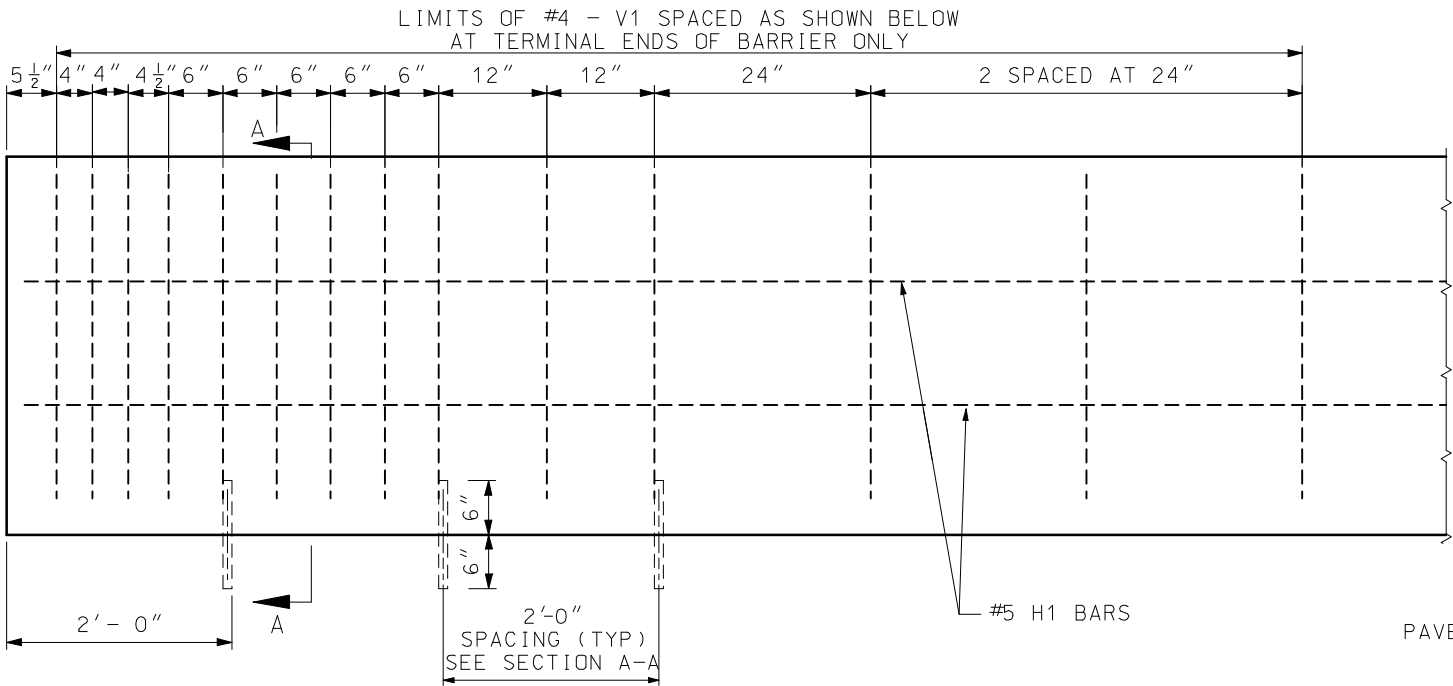
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
<p>PERMANENT CONCRETE TRAFFIC BARRIER</p> <p>TYPE C</p>			
DATE: _____	EFFECTIVE: 09-01-2006	617.10D	5/7



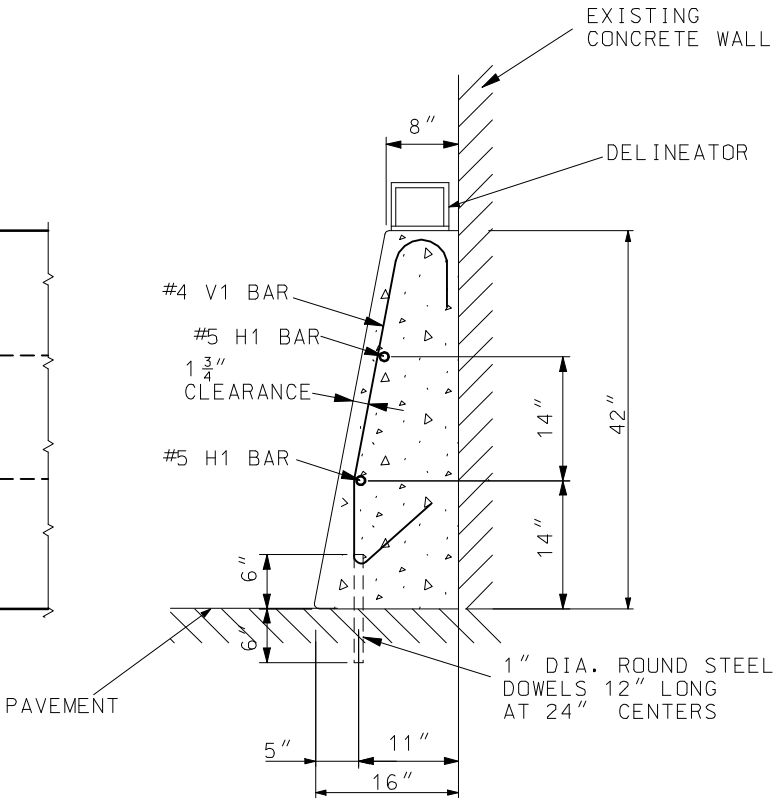
PLAN VIEW



V1 BAR (#4)



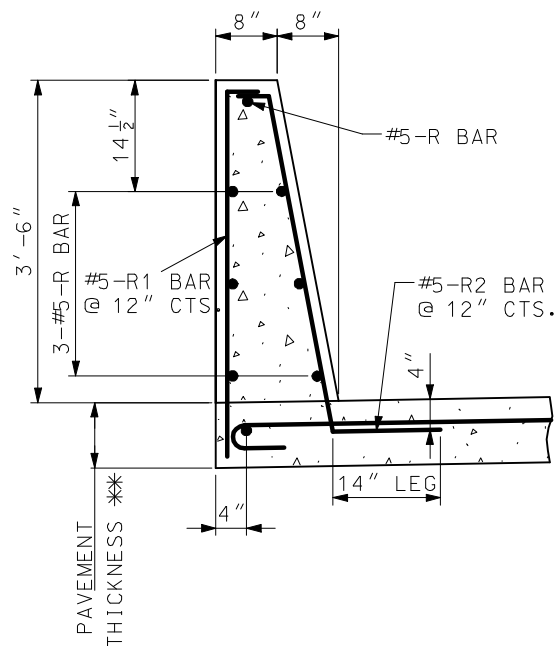
ELEVATION
REINFORCING DETAILS



SECTION A-A

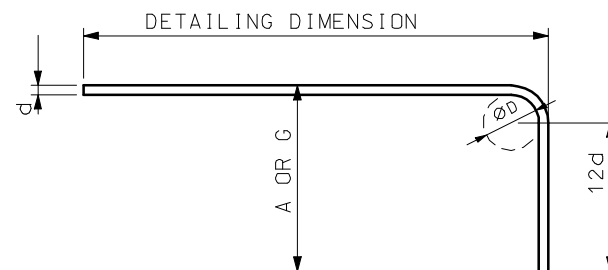
- NOTES:
- BAR SPLICES SHALL BE A MINIMUM OF 24 TIMES THE NOMINAL DIAMETER OF THE BAR.
- ANY METHOD DEvised BY THE CONTRACTOR AND APPROVED BY THE ENGINEER THAT WILL ASSURE THE LONGITUDINAL REINFORCING STEEL WILL BE POSITIONED $\pm \frac{1}{2}$ INCH AS DIMENSIONED WILL BE SATISFACTORY.
- THE CONTRACTOR HAS THE OPTION TO SLIP-FORM THE BARRIER. IN WHICH CASE, ADDITIONAL REINFORCEMENT MAY BE TIED TO THE UPPER TWO-THIRDS OF THE REINFORCING CAGE TO PROVIDE BRACING.
- THIS BARRIER SHALL NOT BE USED TO SUPPORT HIGHWAY LIGHTING POLES.
- THIS BARRIER SHALL NOT BE USED FOR BRIDGE ROADWAY APPLICATIONS.
- SAWED JOINTS SHALL BE LOCATED AT PAVEMENT TRANSVERSE JOINTS.
- TYPE D SHALL BE USED ONLY AT LOCATIONS SHOWN ON PLANS.
- FOR DELINEATOR DETAILS, SEE SHEET 1.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
PERMANENT CONCRETE TRAFFIC BARRIER TYPE D			
DATE: _____	EFFECTIVE: 09-01-2006	617.10D	6/7

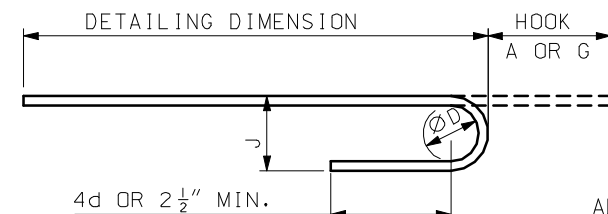


PART SECTION THROUGH BARRIER

TABLE A TRANSVERSE PAVEMENT REINFORCEMENT	
PAVEMENT THICKNESS **	BAR SIZE & SPACING
8"	#5 @ 4"
9"	#5 @ 5"
10"	#5 @ 6"
11"	#5 @ 7"
12"	#6 @ 12"
≥ 13"	#6 @ 12"



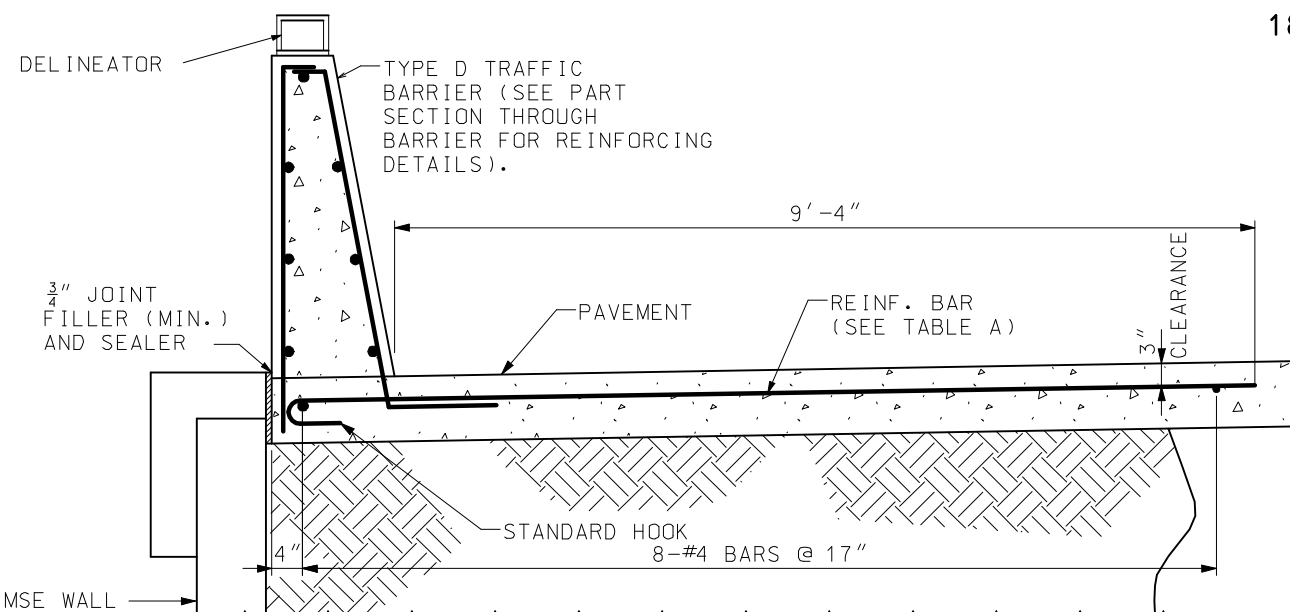
90° HOOKS



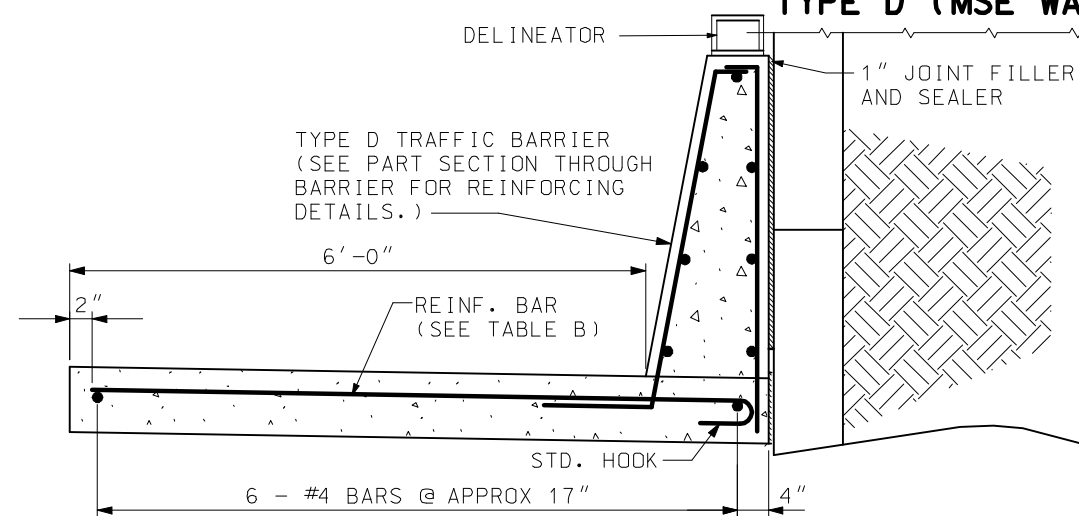
180° HOOKS

END HOOK DIMENSIONS				
BAR SIZE	D (IN.)	ALL GRADES		
		180° HOOKS A OR G	J	90° HOOKS A OR G
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	12"

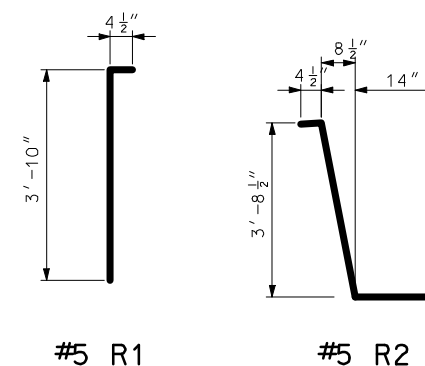
ALL STANDARD HOOKS AND BENDS OTHER THAN 180° TO BE BENT WITH THE SAME PROCEDURE AS FOR 90° STANDARD HOOKS.



TYPE D (MSE WALL) TRAFFIC BARRIER ON TOP OF MSE WALL



TYPE D TRAFFIC BARRIER AT THE SIDE OF MSE WALL



#5 R1

#5 R2

NOTES:

MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1 1/2", UNLESS OTHERWISE SHOWN.

** SEE ROADWAY PAVEMENT DESIGN.

TYPE D SHALL BE USED ONLY AT LOCATIONS SHOWN ON PLANS.

FOR DELINEATOR DETAILS, SEE SHEET 1.

TABLE B TRANSVERSE PAVEMENT REINFORCEMENT	
PAVEMENT THICKNESS **	BAR SIZE & SPACING
8"	#6 @ 5"
9"	#6 @ 6"
10"	#5 @ 6"
11"	#6 @ 8"
12"	#6 @ 9"
≥ 13"	#6 @ 9"

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
		PERMANENT CONCRETE TRAFFIC BARRIER AT MSE WALL TYPE D	
DATE: _____	EFFECTIVE: 09-01-2006	617.10D	7 7